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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,916	11/06/2003	Hung-Ping Chen	10939-US-PA	2915

31561 7590 07/14/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER	
TRAN, VINCENT HUY	

ART UNIT	PAPER NUMBER
2115	

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/605,916	CHEN, HUNG-PING	
	Examiner	Art Unit	
	Vincent T. Tran	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3 and 5-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3 and 5-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to the communication filed on 5/30/06.

2. Claims 1, 3, 5-26 are pending.

3. Claims 2 and 4 cancelled, claims 15-26 are new.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

5. Applicant's arguments filed on 5/30/2006 for claims 1-3 have been fully considered but they are not persuasive.

6. Applicant's arguments are basically in the following points:

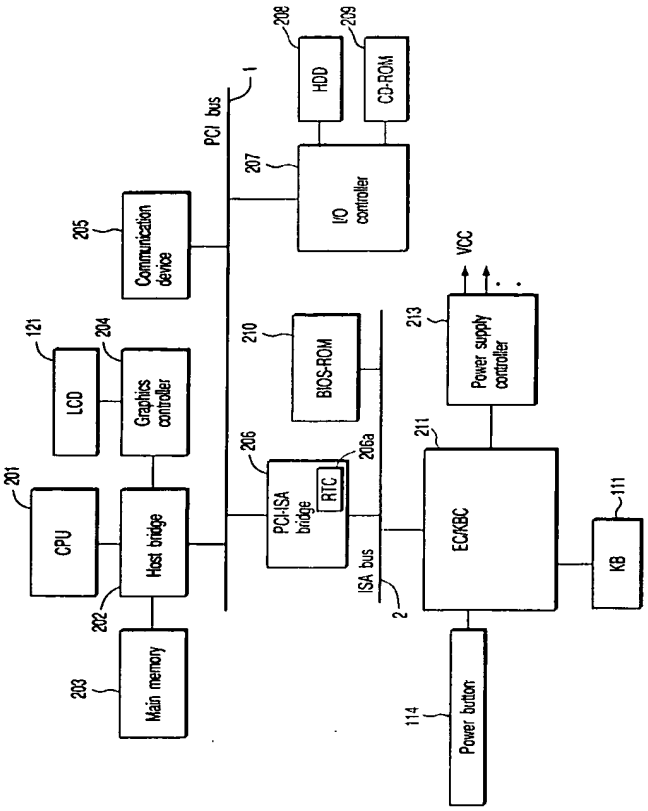
- Each of the boot select code and the MBR code in Ding is software and is obviously different from the embedded controller in claim 1.
- Ding only teaches selecting a boot partition by pressing number keys. Ding teaches nothing about keyboard controller. The keyboard controller in claim 15 is a hardware component which obviously different from the software solution.

Examiner respectfully disagree with the above argument:

- As disclose by Ding in col. 6 lines 37-55, Ding teaches that the actual text, number, key functions or keystroke entered by way of the boot partition selection of fig. 3 can be configured in any way including number or key, mouse or other data input mechanism to enable the section of either one of the boot partition; the method then continues to

operation where a boot flag is modified sot that the user-selected partition will become the boot partition. Specifically, Ding teaches the user may pressing 1 or 2 onto a keyboard in order to select a desire boot partition. Therefore, it is obvious to one of ordinary skill in the art that the system of Ding inherently encompasses the claimed selecting the multi-partition boot selection flag is performed by an ***embedded/keyboard controller*** in the computer.

• A drawings of a convention PC system wherein the system included a Embedded/Keyboard controller [EC/KBC 211].



• In a conventional PC system, the keyboard controller (or embedded controller) have been existed for along time. The main purpose of the keyboard/embedded controller is to provide bi-directional communication between the keyboard and the host, to generate SMIs to notify the BIOS of system events. These events include hot keys, thermal condition, battery status and button presses. Therefore, it is obvious the system of Ding is inherently included a keyboard/embedded controller to monitor the key press events.

• The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1 - Kuo et al. US 20020180623

[0007] FIG. 1 shows a block diagram of a **conventional apparatus** for reading the keyboard-commands of the portable computer. In the portable computer system, the keyboard is controlled by an embedded controller (EC) 102. The embedded controller 102 is substantially a microprocessor, which comprises a number of internal devices such as a read-only memory (ROM), a random access memory (RAM), registers, and an input/output interface. By designing complicated command codes in the embedded controller 102, the embedded controller 102 is capable of performing various complicated functions according to an external clock signal (CK). The conventional apparatus for reading keyboard-commands comprises an embedded controller 102, a decoder 104, and a multiplexer 106, as shown in FIG. 1.

2 – Hsu US 20040093489

Hsu teaches a method for rapidly booting and switching between applications of the computer system. Specifically, Hsu teaches the selection of a particular application is activated though the BIOS wherein, when a key is press, the BIOS retrieves a scan code from the first hot key by checking a keyboard controller (embedded controller). The first hot key boots the computer system and activates the first embedded as system as well [paragraph 0022].

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 3, 5-6, 8-18, 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ding U.S. Patent 6,430,663 in view of Raghavan et al. U.S. Patent 6,931,522.

9. As per claim 1, Ding discloses a selectable booting operation method by a BIOS with multi-partition in disk which comprising a plurality of partitions [col. 2 lines 18-22], comprising:

turning on a power of a computer [inherent];

initializing a plurality of hardware components in the computer [inherent];

executing an interrupt service program [inherent];

reading a MRB in the disk [col. 4 lines 52-65; col. 5 lines 59-65];

setting a multi-partition boot selection flag [212 fig. 3A; col. 2 lines 51-56; col. 6 lines 53-67];

selecting one of the partitions by using the multi-partition boot selection flag; [from col. 6 line 65 to col. 7 line 2]; and

reading a boot sector in the one of the partitions to boot the computer [col. 7 lines 5-10],

wherein selecting the multi-partition boot selection flag is performed by an embedded controller in the computer [fig. 3B – inherent as discuss above].

However, Ding does not explicitly teach determining whether the one of the partitions is bootable or not.

Raghavan et al. teach another method for booting a computer system to a know state at system start-up wherein the system comprising a hard disk with at least two partition, each containing a different or may be the same copy of a system image [col. 2 lines 38-40; col. 9 lines 49-54]. Specifically, Raghavan et al. teach determining whether the one of the partition is bootable or not [206 fig. 4a].

At the time of the invention was made, it would have been obvious to one of ordinary skill in the art to have modified the system of Ding with the step of determining whether the one of the partition is bootable as taught by Raghavan et al. to ensure that the computer system is successfully booting to a know state.

The motivation would have been to prevent the computer system from booting to unknown state in the event that the selected partition is corrupts or damage.

10. As per claim 3, Ding teach the selecting the multi-partition boot selection flag is performed by a keyboard controller in the computer [fig. 3B – inherent as discuss above].

11. As per claim 5, Ding teaches the setting the multi-partition boot selection flag is performed by an embedded controller in the computer [col. 5 lines 64-67].

12. As per claim 6, Ding teaches the setting the multi-partition boot selection flag is performed by a keyboard controller in the computer [fig. 3B].

13. As per claim 8, Ding teaches the multi-partition boot selection flag is stored in a memory in the computer [from col. 6 line 53 to col. 7 line 9];

14. As per claim 9, Ding teaches the multi-partition boot selection flag is stored in a register in the computer [inherent].

15. As per claim 10, Raghavan et al. teach wherein when the one of the partitions is not bootable, a boot fail message is displayed [282 fig 5].

16. As per claim 11, Raghavan et al. teach wherein when the one of the partitions is not bootable, a default partition is the disk set by the BIOS is read [206 fig. 4a to 232 fig. 4b].

17. As per claim 12, Raghavan et al. teach when the default partition is bootable, a boot sector in the default partition is read so as to boot the computer [232-244 fig. 4b].

18. As per claim 13, Raghavan et al. teach when the default partition is not bootable, a boot fail message is displayed [282 fig. 5].

19. As per claim 14, Official Notice has taken the INT 19H interrupt is a well know BIOS routine which causes the boot sector from the boot device such as a hard drive, to be read into the memory.

20. As per claim 16, it is noted that the limitation do not substantially differ from claim 1, with the exception of the limitation reciting "a keyboard controller". As demonstrated previously, the combination of Ding and Raghavan anticipated the limitations in claim 1. The limitation regarding the keyboard controller also anticipated by Ding as demonstrated in the section response to argument that the keyboard and embedded controller are one of the same in most convention system.

21. As per claim 16, 17, 18, see discussion in claim 1, 5, 6.

22. As per claim 20-26, see discussion in claim 8-14.

23. Claim 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Ding/Raghavan as applied to claim 15 above, and further in view of Khanna.

24. As per claim 19, Ding/Raghavan does not teach setting the multi-partition boot selection flag is performed by a remote controller.

Khanna teaches another method for booting a computer system from the selection of the multiple bootable programs [col. 1 lines 40-47]. Specifically, Khanna teaches the setting of the multi-partition boot selection flag is performed by a remote computer [col. 1 lines 48-60].

At the time of the invention was made, it would have been obvious to one of ordinary skill in the art to have modified the system of Ding/Raghavan with the setting of the multi-partition boot selection flag is performed by a remote controller.

The motivation would have been to provide the technician an ability to boot and diagnose the computer system remotely as taught by Khanna [col. 6 lines 1-6].

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent T. Tran whose telephone number is (571) 272-7210. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas c. Lee can be reached on (57 1)272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vincent Tran

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